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## ANTIDOTES TO AN INFODEMIC



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## THE CONTRIBUTORS

**Words by**  
 Danny Buckland  
 Michaila Byrne  
 Cheyenne Eugene  
 Isabel O'Brien

**Edited by**  
 Katherine Colvin  
 Anaya Malik  
 Janet Nzisa  
 Louise Rogers  
 Theo Wolf

**Production & Design**  
 Gennaro Draisci  
 Roy Ikoroha  
 Tian Mullarkey  
 Steven Paul  
 Emma Rayner

**Commercial & Marketing**  
 Marc Koskela  
 Head of Marketing  
  
 Daniel Healy  
 Chief Commercial Officer

## CEO'S LETTER



As the vaccine rollout gains momentum, there is light at the end of the tunnel for many of us. These past 14 months have truly left their mark, particularly on the pharmaceutical industry, which despite facing unprecedented challenges has permanently changed for the better. Transformation and streamlining has taken place across the industry, and company names that were completely unfamiliar a year ago are now known and respected household names.

Amidst the global uncertainty, pharma has been a constant that has never stopped researching, developing, and prevailing. This issue examines how pharma can sustain and nurture this solution-focussed culture.

In our feature, you can hear from industry thought leaders who offer solutions for how to combat the growing problem of misinformation, address vaccine hesitancy, and reclaim healthcare narratives amidst an 'infodemic'.

For this issue's catalyst interview, Bill Sibold, Executive Vice President and Head, Sanofi Genzyme, considers how public perceptions of pharma have progressed as well as how pharma can take more responsibility in addressing health inequities uncovered by the pandemic.

In our infographic, 'The Growing Market of Biotechnology', we look at how this share of the market continues to grow in value, and we also have articles exploring access to vaccines, patient advocacy, and the importance of creating a work culture that is diverse, inclusive, and fosters a sense of belonging.

As you delve into this issue of GOLD, I hope that you are invigorated by the progress that has been made. The industry's leadership and determination throughout this time has been inspiring and momentum is only growing; creating space for optimism and carving out a better and brighter future. ●

Spencer Gore,  
Chief Executive Officer

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**TO BE OR TO BELONG?**

# SPOTLIGHT

In this issue of GOLD, we reveal the pharmaceutical industry's key news stories from the past few months, covering the latest COVID-19 vaccine developments, FDA and European Commission approvals, and major collaborations.

**26  
JAN**

'The 2021 Access to Medicine Index' is published, with GSK ranked in first place

**25  
FEB**

Merck & Co. places an offer to acquire Pandion Therapeutics in \$1.85 billion deal

**22  
MAR**

Takeda and Evotec form alliance for strategic RNA targeting drug discovery and development

**28  
JAN**

Novavax's COVID-19 vaccine shows 89% efficacy in UK Phase 3 trial

**01  
MAR**

Boehringer Ingelheim and Gubra partner to identify peptides to treat obesity

**27  
MAR**

FDA approves BMS and bluebird bio's Abecma, the first cell-based gene therapy for patients with multiple myeloma

**03  
FEB**

GSK and CureVac partner to develop next generation mRNA COVID-19 vaccines

**04  
MAR**

Novartis signs initial agreement to manufacture CureVac's COVID-19 vaccine

**29  
MAR**

Johnson & Johnson announces agreement with African Union for ≤400 million doses of its COVID-19 vaccine

**17  
FEB**

The European Commission purchases 150 million doses of Moderna's COVID-19 vaccine

**16  
MAR**

Roche launches SARS-CoV-2 variant test to monitor COVID-19 mutations

**30  
MAR**

The European Commission approve Roche's Evrysdi, the first at-home treatment for spinal muscular atrophy



# FRAUD, FAKERY, AND COUNTERFEIT VACCINES

Words by Isabel O'Brien

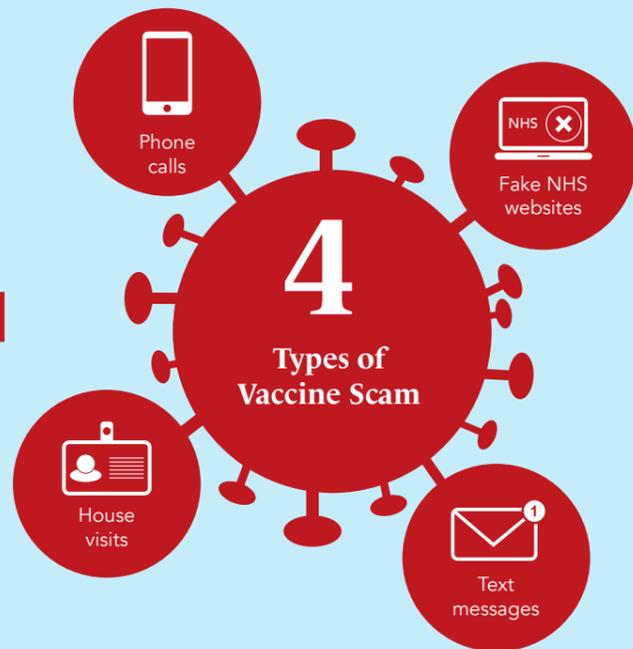


As the roll-out of COVID-19 vaccines progresses across the globe, the inevitable challenge of fraud and counterfeiting is growing. How severe is this problem and what part must the industry play in protecting the public from fraudsters?

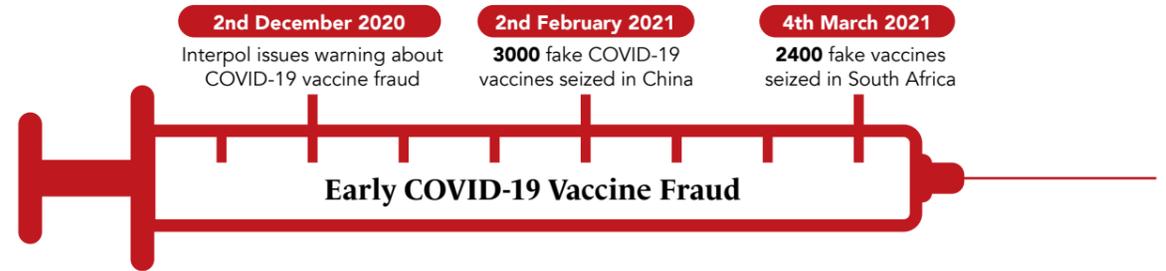
Humans have been copying, forging, and faking since as far back as 3300 BC. A primitive example was the cowrie shell, a glossy marine mollusc used as currency, which was counterfeited out of ivory, bone, clam shell, and stone. But as society has advanced, shells abandoned for coins, and coins exchanged for bright plastic credit cards, financial fakery has expanded to pharmaceutical fraud; such fraud has been subject to high scrutiny and tough regulation yet continues to pose a threat to vulnerable individuals all around the world.

**When the COVID-19 vaccine approvals started coming in, we started celebrating the victory of science, thinking 'we have achieved the panacea'**

The substances that are typically the targets of counterfeiters include those for the most prolific and widespread diseases; a tagline tailor-written for the COVID-19 vaccines, which hold the key to ending national lockdowns and offer a tentative gateway back to normality.



Source: GOV.UK, 2021



Source: FT, 2021

“When the COVID-19 vaccine approvals started coming in, we started celebrating the victory of science, thinking ‘we have achieved the panacea’, but then news about vaccine frauds, scams, and document forgery started pouring in via news channels and social media from China, Europe, the US and India,” says Dr Maya Sharma, Global Medical Director, Win Medicare, and Advisory Board Member, JPADR.

Evidently, with great triumph comes great responsibility. While the industry has successfully manufactured a multitude of vaccine solutions to the pandemic, the aim must now be to protect the public from receiving illegitimate doses from unaccredited sources, a role that will require action from across the wider pharma metropolis. “Vaccine producers clearly have an incentive based on patient safety, wider obligations, and ethical considerations,” says Gustaf Duhs, Partner, Head of Regulatory, and Charlotte Tillett, Partner, Head of Life Sciences, Stevens & Bolton.

While supply chains are subject to frequent and rigorous testing, with Duhs and Tillett commenting: “Pharmaceutical companies and their trade associations work closely with government authorities, regulators, customs, and the police, to ensure the lawful supply of medicines.” Extra vigilance and layers of security must be investigated and implemented, with medical affairs playing a role in creating watertight distribution channels to protect vials and packaging from being intercepted by fraudsters.

“MA can work in collaboration with logistics and supply chains on radio-frequency identification (RFID) tagging of the vaccine batches and QR codes for each injection for end-to-end tracking of each vial,” suggests Sharma. “Blockchain technology could also take away these worries, but this may still be called a futuristic approach, as not many vaccine companies are well versed with it or have the workforce to implement it in the imminent future.” While blockchain use in supply chains is still in its infancy, this could serve as a valuable tool for protecting vaccines should vulnerabilities exceed expectations and need further protection.

Following the success of leading voices from pharma appearing on television during the vaccine development process, marketers must position their figureheads in front of the cameras once again. “Due to public enthusiasm for ‘freedom from COVID-19’, news outlets have been carrying details

about clinical trials, regulatory approvals, vaccine pricing, and distribution,” says Kay Wesley, CEO, Kanga Health. “I would like to see companies pool their marketing budgets to support major public health campaigns to encourage vaccine uptake, discredit the ‘anti-vaxxers’, and combat vaccine fraud.” Collaborating with governments and public health organisations will be necessary to create energising awareness campaigns around the dangers of fraud and how to avoid it.

**We have seen some extremely worrying stories locally in the UK, including fraudsters going to the homes of elderly people**

Social media is also a breeding ground for scams and misinformation on which it will be important to establish an anti-fraud rhetoric. “Health providers and companies must also be vigilant in monitoring social media spaces to quash misinformation as quickly as possible and respond to patients’ questions as they arise,” warns Wesley.

While we cannot forecast the impact of COVID-19 vaccine fraud, it is critical to focus our attention, resources, and public consciousness on this issue sooner rather than later. “It is too early for us to assess on a global basis what the impact of COVID-19 vaccine fraud will be. However, we have seen some extremely worrying stories locally in the UK, including fraudsters going to the homes of elderly people and charging them to administer fake vaccines,” says Duhs and Tillett. With schemes likely to only increase in sophistication, early action will be critical for preventing global populations from succumbing to unnecessary harm.

While concerns exist, we can feel confident in the knowledge that the pharmaceutical industry has been built and evolved not just to create medicines, but also to ensure that they are safely administered to patients. We are not only equipped to stop the cowrie shells from being infiltrated by clams, but also to help the public separate con artists from the real deal as vaccine programmes expand and progress. ●

# ANTIDOTES TO AN INFODEMIC

With the democratisation of information comes the proliferation of misinformation. Social media, 'fake news', and conspiracy theories are seeping into mainstream culture and, if not addressed, could have devastating impacts on public health. What can the industry do to quell fears around vaccine hesitancy and reclaim healthcare narratives?

Words by **Michaila Byrne**





When the outbreak of the Russian Flu ravaged the globe in 1889, science was undergoing a noteworthy period of transformation and advancement. At a loss for how to account for or explain this new illness, theories began to spread amongst the public promulgating that electric light bulbs could be the mysterious source of the disease.

Health misinformation and disinformation are nothing new and have long been symptoms of crises that run concurrently with technological progress. The parallels between 1889 and 2021 are plain to see, with fear driving behaviour and uncertainty breeding distrust.

The pharmaceutical industry may have been the solution to the COVID-19 pandemic, but a final push is necessary to ensure that the hard work of developing vaccines is not in vain. After all, vaccines don't save lives: vaccinations do; and the ongoing challenge of health disinformation must be addressed head-on before it permeates other areas of healthcare.

Before remedying any condition, a physician must understand from where it originated. So why is misinformation proliferating? As exposed in the 2020 Netflix documentary 'The Social Dilemma', social media is without doubt one of the prime culprits, with algorithms that are designed primarily for engagement at risk of facilitating the dissemination of falsehoods. "As painful as it may be to pharma companies that spend a lot of money on marketing, the misinformation



creators are simply better at it. They're not preoccupied by things like 'brand consistency' and 'authenticity,'" explains Paul Simms, Managing Partner, Impatient Health, and pharma provocateur. "Controversy and antagonism are engaging, so it's true that platforms support the misinformation. They give lip service to combatting it because... it's what drives their revenues." José Maria Guido Avila, Global Lead, HCP Marketing, Sanofi, affirms this diagnosis: "Misinformation has proliferated in social media, giving a voice to anti-vaccination groups, spreading false information and conspiracy theories." It is therefore vital that pharma take an active lead in discrediting claims such as profit always being secondary to the health of patients and the public. As Florence Pryen, Head of Business Development, Mendes, points out: "People are now looking for answers to their symptoms online, and trust in their practitioner is lessened. This is an important link, which needs to be strengthened."

So, what are the public's legitimate concerns, and how can pharma give consumers credence to meet them with understanding?

Definitions are important, so we must draw a clear distinction between the intentional spreading of falsehoods and sincere concerns, questions, or hesitations. As Rob Jekielek, Managing Director, The Harris Poll, puts it: "There's a scale of misinformation if you will. People who are purposely trying to turn others to a very specific agenda — using information that is clearly not fact-based — is a very egregious layer of misinformation. But it is probably more important to think

**When HCPs and the general public don't have trust in medical innovation, it becomes a big problem**

about the 30–35% of the population that are more reluctant or hesitant." From a public health perspective, these tend to be populations traditionally disenfranchised from the healthcare system: those who aren't using healthcare resources on a more preventative or proactive basis and are only coming into contact during a visit to A&E.

In considering preventative care, there are lessons to be learnt from other areas of health, including contraception. These are the only other medications, alongside vaccines, that are dispensed to healthy people. Having faced similar challenges in dispelling misconceptions around IUDs, Keren Lesham, CEO, OCON Healthcare, stresses: "When HCPs and the general

public don't have trust in medical innovation, it becomes a big problem. It can slow down innovative treatment solutions that could have a massively positive impact and create a paradigm shift in the way we do medicine today."

It can be tempting to dismiss and characterise all hesitancy as ignorance, quackery, or stupidity, but psychology shows that these views only purport elitism and further entrench views and doubts. Simms poses: "How many of us in our industry have actually trawled through the world of anti-vaxx materials or are we just reinforcing our own echo chamber? I have, and what I have seen is actually quite compelling. Anyone without scientific training could find the material very compelling and reasonable."

When we don't know something, today's first port of call is a quick Google search. Avila thinks Silicon Valley tech giants could become valuable assets to pharma in the future: "What if we as an industry worked with Facebook, Amazon, Apple, and Netflix, and partnered on the frontline to identify fake news and provide the right information for both HCPs and patients." Collaboration is vital, as illustrated through the development of vaccines. "We need the media, HCPs, and authorities to work together to accelerate innovation within healthcare and communicate it transparently and scientifically back it up," says Lesham.

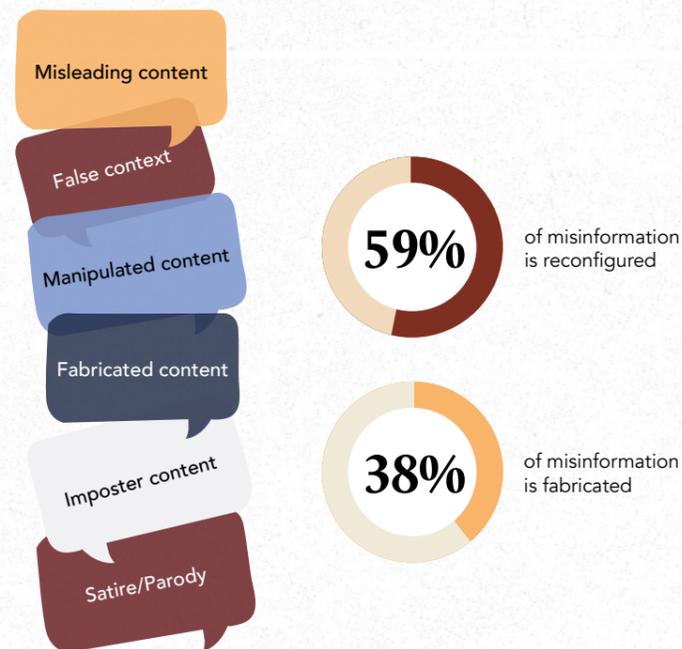
"Every pandemic has had misinformation; look at AIDS, look at H1N1, look at SARS, and probably even going back to the bubonic plague," says Jeff Robson, Marketing Manager,

Veracyte. The AIDS pandemic was particularly marked by misinformation, Robson highlights that it was initially considered to be an exclusively 'homosexual disease'. Simms similarly proposes that we look back at history to heed its lessons, as well as borrow approaches from other industries: "What was done to reduce vaccine hesitancy in smallpox in the last century? How did the climate change movement enter the national consciousness when there are people who believe it's all nonsense? I would not even be slightly surprised if the same principles were at play and could be codified."

Clear communication of recommendations to patients, their families, and communities could also have substantial impact when it comes to misinformation. "The scientific knowledge, competence, and capacity that lie within a big pharma company are of great value in this battle against misinformation," says Ana Rita Ferreira, Regional Europe Medical Director, Novartis. "A joint, simple communication from 'fake-news-free' sources, where the community can gather clear, accurate information and help to raise awareness of existing reputable platforms, should be developed." Improving community health literacy will encourage inquisitive mindsets where individuals assess information and its sources, not just amongst the public but HCPs too. Pryen elaborates: "The best position for pharma remains a high scientific profile, building a strong link with the medical community for independent, coherent communication based on available scientific data."

As the old saying goes: you can take a horse to water, but you can't make it drink. If uptake of COVID-19 vaccines is going to become a widespread reality, pharma must step out of the shadows and actively reclaim narratives. Through listening and engagement, we can understand how and why misinformation is so rife, address it head-on, and help discover the core truths that are so fundamental to progress in both science and in humanity. ●

**Types of Misinformation**



Source: Reuters Institute, 2020

**Public Perception of Barriers to Reliable COVID-19 Information**

**74%**  
Fake news and false information

**45%**  
Lack of trustworthy information sources

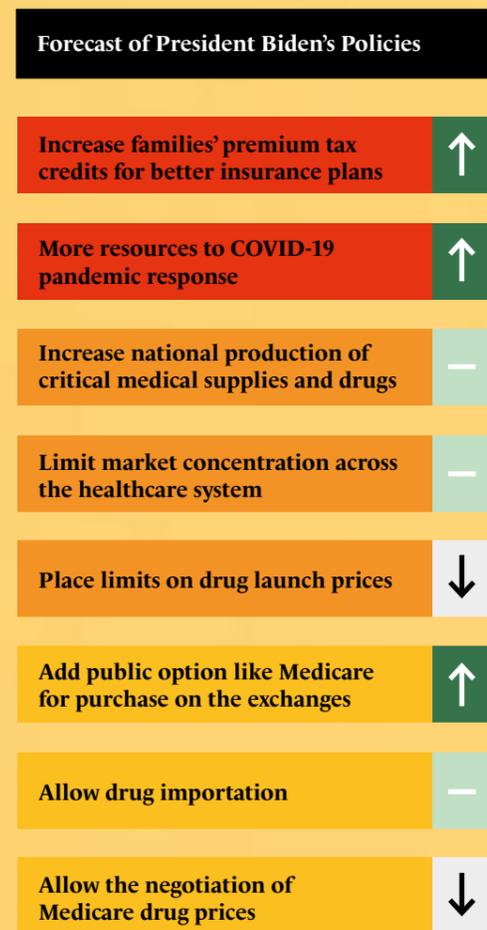
**85%**  
Information communicated by politicians rather than scientists

Source: Statista, 2021

# WHAT'S NEXT, MR PRESIDENT?

Words by **Isabel O'Brien**

**With each new President beckons a new political chapter; a period distinctly different from the one that preceded it. As the pharmaceutical industry transitions from the Trump to the Biden-era, what changes are expected, and which functions will be most affected?**



**Likelihood of gaining traction**

- High
- Moderate
- Low

**Impact on pharmaceutical and life sciences companies**

- ↑ Positive
- Neutral
- ↓ Negative

**W**hen a new state leader is elected, having triumphed on the campaign trail and won the right to represent their nation, there will always be advocates and opposers. These will exist in varying extremities, both in the public that voted for them, and also for the industries that will operate under them, based on the new leader's objectives and outlook on public policy.

The election of President Joe Biden is resolutely no exception. With the nail-biting race and election, characterised by high emotion, controversy, and a global pandemic, stability and recovery will no doubt be a critical and popular agenda. However, when the dust settles and COVID-19 is no longer a key prioritisation, what action will this administration take in the pharmaceutical realm and how will the industry fare under the rule of the new elect?

As with any fresh political chapter, forecasts are in their infancy and not all outcomes are possible to predict. However, as William Soliman, CEO, Accreditation Council for Medical Affairs (ACMA), stipulates, while President Trump was a new face on Capitol Hill, "President Biden has been part of the fabric of Washington D.C. since the early 1970s and is therefore a more 'predictable' leader for pharma." This political track record allows for more precise benchmarking of the policies that will be advanced under his leadership.

Having served as President Obama's deputy and played a leading role in passing the Affordable Care Act (ACA) in 2010, President Biden will likely seek to increase access to healthcare in the US. "Being one of the frontiers in the launch of this plan, the Biden team has proposed to bring in more benefits within ACA," says Rangaraja Konar, Business Analyst, Global Pricing Innovations. "In sectors like pharmaceutical, medical devices, and diagnostics, this would create a positive impact. With more people getting covered under the scheme, there would be a subsequent effect on increased access to drugs, devices, and diagnosis."

With the number of uninsured US citizens decreasing from 60 to 27 million in the last 10 years since the ACA's creation, further expansion of this scheme will be a step towards creating a fairer and more inclusive health landscape, which is an agenda not only shared by pharma, but a pressing priority for them given the health inequities that were uncovered by COVID-19.

While alignment is evident, the industry can expect challenges to arise too. "Healthcare executives cannot simply dust off their Obama-era playbooks. Biden will assume the presidency in a country that is very different than it was in 2009," warns the PwC Health Research Institute. Just as President Trump fired up the conversation about drug pricing in the US, President Biden is expected to review and address how drugs are costed in the country.

"There are chances for the government to bring a price cap, especially to generics and branded generics with reference to the prices in other high-income countries," says Konar. "Prescription drug reform is another area that this new government is aiming to ponder upon, as almost 20% of the spending done by the national health insurance policy goes for the expenditure of prescription drugs."

This could require the industry to provide additional evidence to quantify the cost of their innovations and therapies, with medical affairs leading the way in gathering such insights: "MA teams, especially those with responsibility for health economics and outcomes research functions, will be more involved in gathering data and helping to collect patient reported outcomes and pharmacoeconomic research to support the prices their companies prefer," explains a report by the ACMA. With Soliman corroborating: "MA and MSL professionals will be in higher demand to be the primary purveyors of information to the medical community and the wider patient advocacy community as well."

While the industry will see a calibration in objectives with this new administration, "The healthcare sector might be up to face a mixed bag of impacts on Joe Biden winning the presidential elections," concludes Konar. There is not yet a clear indication of whether the administration will be a friend or foe, therefore the industry must keep its purpose front of mind and be ready to ramp up capabilities should further questions be asked and value propositions need to be reconfigured. ●



**Healthcare executives cannot simply dust off their Obama-era playbooks**

Source: PwC, 2020

Interview

# Catalyst of Pharma

The path out of this global pandemic is through this industry; the impact has been positive, but we are still at a sensitive moment

## Bill Sibold

Bill Sibold is the Executive Vice President and Head of Sanofi Genzyme. We spoke to him about his passion for the pharmaceutical industry, the changing face of pharma, and what approach is needed to increase the scope and pace of medicine in the future.





**This pandemic has been an accelerator: a so-called shock to the system**

**WHEN YOU WERE A STUDENT STUDYING MOLECULAR BIOPHYSICS AND BIOCHEMISTRY, WHAT EXCITED YOU ABOUT THE MEDICAL LANDSCAPE AND WHAT IMPACT DID YOU HOPE TO HAVE ON IT?**

I studied molecular biophysics and biochemistry as part of a pre-med focus. I loved the idea of having an impact on people and treating people, but after long consideration and discussions with friends who said if you're not 100% convinced to go to medical school, don't do it – I wasn't 100% convinced. But I still had this interest in medicine, science, and business, so the pharmaceutical industry was a perfect fit. Now, I am coming up to my 30th anniversary in the industry and, for me, it has been a great way to help more people than I ever could have as an individual physician. Our industry can save and transform lives on a global scale; that is what attracted me to it and that is what has kept me in it.

**THE PHARMACEUTICAL INDUSTRY WAS THRUST ONTO THE GLOBAL STAGE BY COVID-19. HOW HAS ITS WORK OVER THE PAST YEAR IMPACTED PUBLIC PERCEPTIONS OF THE INDUSTRY?**

When I started in the industry, Merck was in the middle of its seven-year run of being the most admired company in the world. The industry was in absolute high regard. Over the years it has lost that high regard, which has been personally quite devastating because I know the good that the industry does. I say that at every talk that I give, whether it's internal or external, because it is something that isn't said enough, and the pandemic has allowed the world to see what the industry can do. The path out of this global pandemic is through this industry. The impact has been positive, but we are still at a sensitive moment. However, from our work over the past year, I believe we are on a path of being recognised as the noble industry that we are. I believe we can get there. I have neighbours saying thank you for what has been done with the vaccine effort; more and more people are starting to acknowledge the good that we do. A shift is taking place, but we have got a lot more work to do to make sure it is ingrained in the public's thinking.

**HOW COULD THE PHARMACEUTICAL BUSINESS MODEL BE SET TO EVOLVE FOLLOWING SUCCESSFUL COLLABORATIVE EFFORTS IN THE DEVELOPMENT OF COVID-19 VACCINES?**

Collaboration has always been critical even within a company. Across the whole value chain of an organisation, from research through to development,

commercialisation, and manufacturing, it all must work together. However, in this pandemic, other types of collaboration have come to the centre. In order to successfully develop treatments and a vaccine for COVID-19, public and private interests have had to come together across the entire healthcare system. This pandemic has been an accelerator; a so-called shock to the system, and if there is one positive that has come out of this past year, it is that it has accelerated the pace at which we work and how we think about working across the industry. If we can continue this type of collaboration going forward and apply it to the problems of today or the problems of tomorrow, I think we will be able to move even faster and better in the future.

**FOLLOWING THE EXPEDITION OF APPROVALS LAST YEAR, HOW CAN THE PHARMACEUTICAL INDUSTRY WORK ALONGSIDE REGULATORS TO REDUCE AVERAGE TIME TO MARKET FOR ALL DRUGS GOING FORWARD?**

The collaborative nature of the regulators during the vaccine development and approval process has been really something to see, and I believe this will, ultimately, change the way we work overall. They want to help and they are changing their ways of working. The potential consistent adoption of cloud-based submissions and real-time reviews is one example, and modernising quality and manufacturing inspections and audits is another. With cloud-based submissions, if we can find a way to expedite, remove the paper, and have a common platform that can be used across geographies and stakeholders, it will allow us to achieve a new global standard. When it comes to quality and manufacturing, a challenge during the pandemic has been moving site inspections and audits to become remote. This is something that would be extremely helpful: real-time Chemistry and Manufacturing Controls reviews and having more mutual recognition between the various agencies. If we can agree on a standard by which these things can be done, done quickly, and shared – that is going to expedite the approval and availability of products.

**HOW CAN THE INDUSTRY TACKLE THE MAGNITUDE OF HEALTH INEQUITIES UNEARTHED BY COVID-19 AND WHAT IS YOUR VISION FOR HOW THEY CAN BE PREVENTED IN THE FUTURE?**

That is a great and complicated question. We had a perfect storm with the pandemic, and it has

**None of us will be successful unless we have worked to solve the problem for the whole**

greater highlighted the health inequities that have always existed. In my opinion, we must address the fundamentals of systemic racism that are pervasive through local, national, and global institutions. We have had a big focus on social determinants of health at Sanofi Genzyme, whether it is through our work in clinical research trials or our corporate social responsibility programmes. As an industry, we can and should get involved, not just during a pandemic. We have to, as a society, take this head on and look at the inputs that are creating the outputs. When thinking about COVID-19, the black and brown communities [in the US] have been more heavily affected, but they are on the same schedule to receive vaccines as other communities that are not as heavily affected. You are only going to be as successful as your least successful effort. It is important to recognise that none of us will be successful unless we have worked to solve the problem for the whole.

**IF YOU WERE SENT TO A JOB FAIR ON THE BEHALF OF THE PHARMACEUTICAL INDUSTRY, WHAT WOULD BE YOUR ELEVATOR PITCH TO A YOUNG SCIENTIST CONSIDERING JOINING THE FIELD?**

You have an opportunity to change, transform, and potentially save lives of people around the world if you join this industry. There is no other industry and no other job in the world that allows you to do that on the same scale. So, if you want to make a difference in the world, there is no better place than right here. ●

# THE EVOLVING LANDSCAPE OF PATIENT ADVOCACY



**JENNIFER CAIN BIRKMOSE**  
Vice President, Global Head of Patient Access and Community Engagement, Sobi



**VALERIA NICOLI-CARR**  
Patient Engagement Specialist

The patient advocacy landscape within the pharmaceutical industry is both vast and evolving; now an integrated, full-fledged corporate function, with roles in patient partnership and engagement growing in numbers and importance. In this roundtable, we hear from two industry thought leaders who share their ideas on how to build and maintain synergy between pharma and patients, as well as what the future holds for this prosperous union.

## WHAT WAS IT ABOUT A ROLE WITHIN PATIENT ADVOCACY THAT FIRST PIQUED YOUR INTEREST?

**Birkmose:** I am fortunate to have grown up in a family of healthcare professionals and advocates who lived and breathed the patient experience I was immersed in from childhood. I witnessed first-hand the importance of having compassion for patients, putting their perspectives first, and acting with speed on their behalf. This compassion and commitment translated directly into daily impact on patients' lives. My mother was also the chairwoman of the American Diabetes Association and I supported her in creating the UN resolution that launched World Diabetes Day.

**Nicoli-Carr:** I have always been passionate about co-creating solutions for patients with patients. It is extremely rewarding to design new solutions while reinventing the way that pharma companies engage with patients, building more meaningful and tailored processes. It is a privilege to facilitate both conversations and practical solutions that have such a tremendous impact. Patients are at the centre of a transformation that is changing every aspect of the pharmaceutical process, from concept design to market launch. Patients are no longer the receiver of a scientifically tested drug prescribed by a trusted HCP, but the key stakeholder of the whole process.

## HOW SHOULD A PHARMA COMPANY ENSURE IT IS WORKING WITH THE MOST APPROPRIATE PATIENT ADVOCACY GROUP (PAG)? WHAT SHOULD THE RESEARCH AND AUDIT PROCESS LOOK LIKE?

**Birkmose:** Selecting the most appropriate PAG to partner with is determined by what issue you are solving. For example, is this a clinical trial design question where you need to verify whether the selected end points and patient-reported outcomes are correct and truly reflect patients' experiences? Are you seeking to co-create real-world evidence data generation activities to raise awareness of patients' burden of illness? Or perhaps you are co-designing a disease awareness or patient support programme in your country. The European Patients' Academy on Therapeutic Innovation (EUPATI) has been a pioneer in answering the call from patients of 'no decisions about me, without me'. They have created a lifecycle map of how to partner with patient organisations.

**Nicoli-Carr:** There is not a one-size-fits-all process for how a pharma company can ensure they are working with the most appropriate PAG. Pharma companies that have an inclusive approach often reach out to different patient groups on an international scale, from small groups to umbrella organisations. When dealing with a variety of groups, the challenge often faced is how to reach out to organisations that are geographically spread out and may have different priorities on their agenda. Successful pharma companies are proactive in building relationships with patient groups, engaging with them through the creation of 'family days', educational projects, or simply collaborating to truly understand their priorities.

**The key to encouraging an ecosystem of collaboration between patients and pharma requires getting serious about a mindset of partnership**

## WHAT ECOSYSTEMS NEED TO BE IN PLACE TO ENSURE COLLABORATIONS BETWEEN PHARMA COMPANIES AND PAGS DELIVER THE MOST VALUE FOR PATIENTS?

**Birkmose:** The key to encouraging an ecosystem of collaboration between patients and pharma requires getting serious about a mindset of partnership. This starts with being open and willing to truly listen and act according to the needs and voices of our patients. A big part of that open conversation is deconstructing the jargon-laden language of the industry into a straightforward rhetoric that is accessible. Secondly, a framework of compliance must underpin all interactions with PAGs, so internal company partnership between legal, R&D, medical, and patient engagement is essential.

**Nicoli-Carr:** It is never too early to engage with PAGs. I have worked with many patients who are willing to provide solutions that go on to benefit a variety of others. Often, patients face

common challenges regardless of their specific disease. The keyword for improving health outcomes should be 'inclusivity'. From a pharma perspective, this means reaching out to patient groups that represent voices who are traditionally less heard, ignored, or excluded. If a pharma company is working on a specific rare disease, reaching out to the umbrella patient group organisation while engaging directly with patients who are less likely to be part of any patient group (for social, geographical, and/or cultural reasons) can provide diverse and valuable insights. These will not only be from patients suffering from that specific condition but will also show how similar conditions are affecting other patients and their families on a wider scale.

## HOW IS THE RELATIONSHIP BETWEEN PHARMA COMPANIES AND PAGS LIKELY TO EVOLVE AND GROW IN THE FUTURE?

**Birkmose:** We are experiencing a massive technology shift in healthcare. The rise of digitisation, the distribution of telemedicine, augmented reality, and virtual reality, have all led to the democratisation of health information and healthcare services for patients. As the healthcare systems become more decentralised, even location agnostic, the experience and voice of the patient will have increasing power and influence. This democratised patient voice means that engaging PAGs can no longer be viewed as a 'nice to have'; it is an essential component of drug development and healthcare innovation. This empowerment combined with a mindset of partnership will put patients in the driver's seat of drug development and healthcare service planning. I am excited about this new opportunity and what it may mean for patients and the sustainability of healthcare systems.

**Nicoli-Carr:** The goal of patient advocacy, and more broadly patient engagement, is shifting towards creating health equity and social justice and highlighting a variety of voices and a broader perspective in health research. In the future, there will be a growing focus on transparency and regulations. Many groups already have available policies that state their financial relationships with pharma companies. In the future, I can imagine how the legislation will evolve to regulate the abundance of information available while safeguarding individual interests and minorities.

The digitalisation era is also offering patients a new way to be heard and seen – patients can now contact their local member of parliament or senator to make their needs visible and create awareness at a national level. Over the course of my career, I have seen how building relationships with PAGs has evolved from a subordinate priority to an integral part of the process. This evolution is only destined to continue gaining momentum. ●

# THE GROWING MARKET OF BIOTECHNOLOGY

Biotechnology is affording us the freedom to create, curate, and control pharmaceutical products at our own pace and to society's needs. Over one decade, the value of the sector has more than doubled, and its share of the total global drug market continues to grow exponentially. We consider the multi-functional uses and potential of biotechnology, highlight some of the biggest players in biotech, and forecast how the market could ascend in the coming years.

## THE BIOTECH BOOM OF 1980

- OCT 14** Genentech makes its initial public offering on the New York Stock Exchange
- OCT 14** Paul Berg wins the Nobel Prize for Chemistry for research into recombinant DNA
- OCT 21** The Stevenson Wylder Technology Innovation Act is signed into law
- DEC 02** The Cohen-Boyer patent is granted, and the Patent and Trademark Law Amendments Act is signed

Source: StatNews, 2020

## THE BIGGEST PLAYERS IN BIOTECH

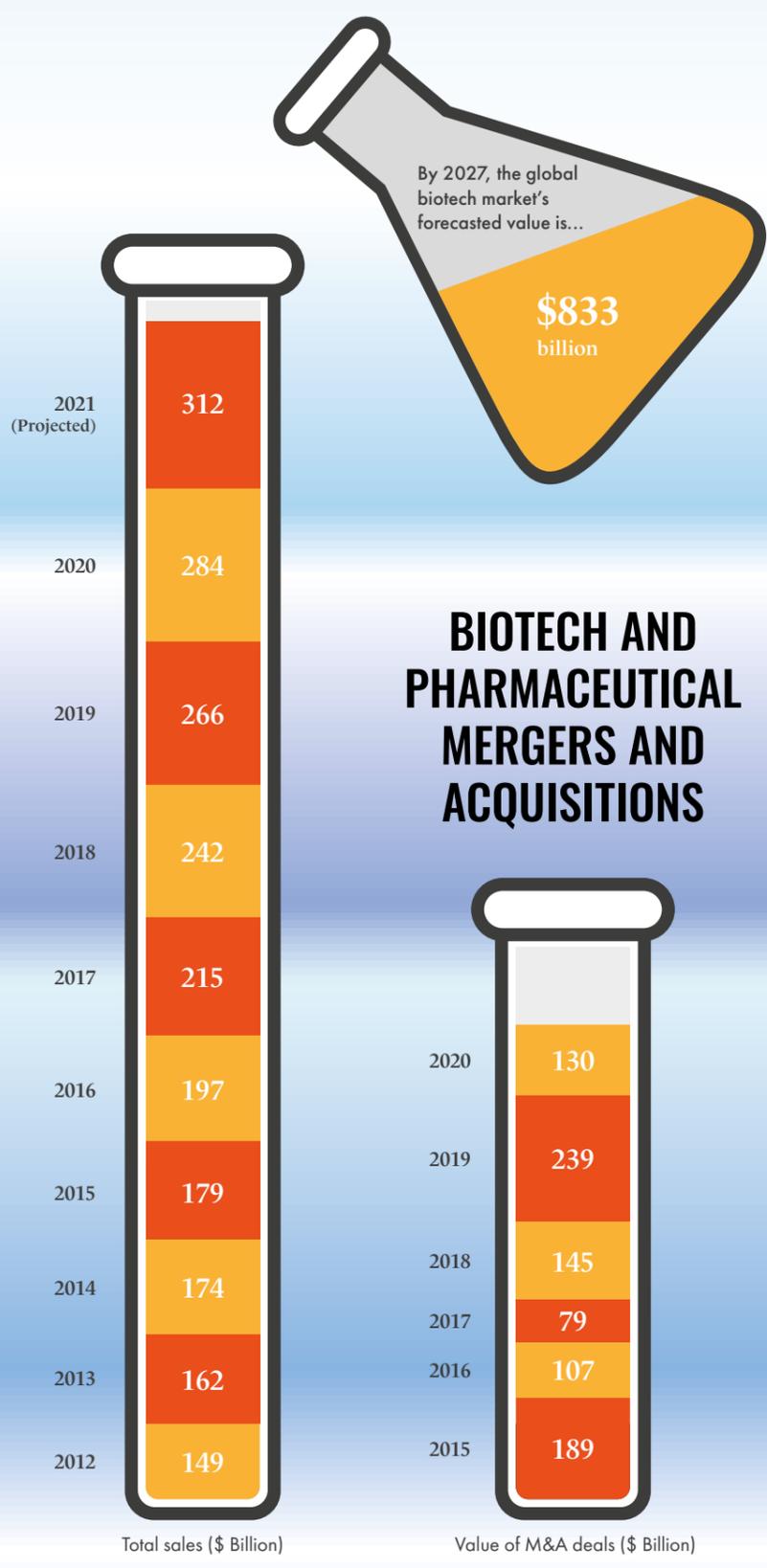
<b>NOVO NORDISK</b>  <b>Revenue</b> \$18.3 billion <b>Net Income</b> \$5.8 billion <b>Headquarters</b> Bagsvaerd, Denmark <b>Focus:</b> Diabetes, Haemophilia, Growth hormone therapy, Hormone replacement therapy	<b>REGENERON PHARMACEUTICALS INC.</b>  <b>Revenue</b> \$7.9 billion <b>Net Income</b> \$2.1 billion <b>Headquarters</b> Tarrytown, New York (US) <b>Focus:</b> Eye disease, Oncology, Cardiovascular, Allergy and inflammatory, Infectious diseases	<b>ALEXION PHARMACEUTICALS INC.</b>  <b>Revenue</b> \$5.0 billion <b>Net Income</b> \$2.4 billion <b>Headquarters</b> Boston, Massachusetts (US) <b>Focus:</b> Cardiology, Immunology
<b>VERTEX PHARMACEUTICALS INC.</b>  <b>Revenue</b> \$4.2 billion <b>Net Income</b> \$1.2 billion <b>Headquarters</b> Boston, Massachusetts (US) <b>Focus:</b> Oncology, Cystic fibrosis, Autoimmunology, Neurology	<b>JAZZ PHARMACEUTICALS PLC</b>  <b>Revenue</b> \$2.2 billion <b>Net Income</b> \$0.5 billion <b>Headquarters</b> Dublin, Ireland <b>Focus:</b> Narcolepsy, Psychiatry, Pain management, Oncology	<b>INCYTE CORP.</b>  <b>Revenue</b> \$2.2 billion <b>Net Income</b> \$0.5 billion <b>Headquarters</b> Wilmington, Delaware (US) <b>Focus:</b> Oncology, Hematology
<b>BIOMARIN PHARMACEUTICALS INC.</b>  <b>Revenue</b> \$1.7 billion <b>Net Income</b> \$-0.02 billion <b>Headquarters</b> Novato, California (US) <b>Focus:</b> Dermatology, Rare genetic diseases	<b>UNITED THERAPEUTIC CORP.</b>  <b>Revenue</b> \$1.4 billion <b>Net Income</b> \$-0.1 billion <b>Headquarters</b> Silver Spring, Maryland (US) <b>Focus:</b> Rare diseases, Vascular	<b>ALKERMES PLC</b>  <b>Revenue</b> \$1.2 billion <b>Net Income</b> \$-0.2 billion <b>Headquarters</b> Dublin, Ireland <b>Focus:</b> Diabetes, Psychiatry

## THE MANY USES OF BIOTECHNOLOGY



Source: CPI, 2015

## TOTAL GLOBAL DRUG SALES OF BIOTECH DRUGS



## BIOTECH AND PHARMACEUTICAL MERGERS AND ACQUISITIONS

Source: Investopedia, 2020

Source: Statista, 2021

## OPERATION VACCINES: ACCESS ALL AREAS

Words by **Michaila Byrne**

**Access to medicine is an enduring global challenge. As the COVID-19 vaccine roll-out progresses, how can the pharmaceutical industry ensure that these vaccines, as well as other essential medicines, reach the most vulnerable populations in low-to-middle income countries?**

**A**ccess to essential medicines in low-to-middle income countries (LMICs) is one of the most complex, yet critical, ongoing challenges facing the pharmaceutical industry today; one that has only been amplified following the development of COVID-19 vaccines. As we roll-out these lifesaving products, it is of the utmost urgency that we reflect on what is being done to combat accusations of ‘vaccinationalism’ and apply actionable insights, guaranteeing access for our most vulnerable populations. The old adage ‘a chain is only as strong as its

**Vaccine companies should negotiate with COVAX, quickly move vaccines into the queue for WHO approval, and ramp up supply**

weakest link’ is more pertinent than ever, a proverb the industry must keep top-of-mind as they begin distributing vaccines across the globe.

Currently, much of the coverage and reality of vaccine distribution suggests that it is only reserved for a select few who can afford them. “The sad truth of vaccine access is that it takes time, sometimes decades, between introduction and significant uptake in high income countries before there is widespread availability and implementation in LMICs,” outlines Jerome Kim, Director General, International Vaccine Institute. “In short, there are coordination issues — prior contracts, manufacturing, approvals, distribution — that are impairing the current roll-out internationally.” The ability to swiftly distribute any medicine is greatly dependent on respective local health policies, financing, resources, as well as pricing processes in individual countries. When it comes to vaccine access in particular, decisive action must be taken promptly for the sake of public health. As Ulf Staginnus, Senior Vice President, Head of Global Market Access and Pricing, Ipsen, warns: “Shortcomings of access to vaccines in a pandemic situation such as today obviously implies an increased risk of further global spread of infections and a prolongation or reimportation of the problem.”

Access to medicine has been an ongoing discussion even before the outbreak of the pandemic, the breadth of which is detailed in ‘The 2021 Access to Medicine Index’, which highlights

**They can manage their intellectual property responsibly and wave patent rights, engage in voluntary licensing, and engage in donation programmes**

concrete, tangible opportunities for pharma companies to make products more accessible in LMICs. Claudia Martínez, Research Programme Manager, Access to Medicine Index, advises: “Companies can adopt a number of different strategies when it comes to delivering and improving access and creating equitable pricing strategies. They can also manage their intellectual property responsibly and wave patent rights, engage in voluntary licensing, and also engage in donation programmes.” For example, companies like Takeda and GSK encourage their senior leadership teams by including access-related incentives in annual bonus plans, a model that ensures access is systemically applied. The report did conclude that there is evidence of pharma integrating access into business practices, but most of these initiatives are focussed on only specific products and apply to only certain countries.

From a manufacturing perspective, capacity and production must be higher on the agenda, coupled with flexible payment plans, contracting, and supply policies. According to Staginnus, in many ways, the approach to vaccine roll-out for the most vulnerable and disadvantaged populations should not be dissimilar to any other medicine: “The main task is to ensure capacities and manufacturing collaborations are maximised to be able to supply sufficient doses worldwide as fast as possible... it is a matter of great commitment of all parties involved, dedication, and for once a focus on outcomes, not just the price for a vaccine.” Fortunately, with the launch of COVAX, there is a path to guaranteeing fair and equitable access for all countries, but it is vital that the industry rally and sincerely commit, with Kim echoing: “Be committed to COVAX... vaccine companies should negotiate with COVAX, quickly move vaccines into the queue for WHO approval, and ramp up supply through contract manufacturing and licensing arrangements.” Pharma’s approach must advance and scale to ensure that it is not only the upper middle-income countries that are benefiting from access strategies, but that we are prioritising the poorest as well.

If any point of a chain is weak, the strength of the whole chain suffers and fails to perform its function; without equitable access, there are no winners, and the chain risks collapse altogether. If pharma can systemically imbed access into their business strategies, they can transform this moment into a global health triumph. To achieve this level of unity and solidarity, access to medicine must be understood and treated not as an afterthought, but as something that is at the core of what companies do and underlines their purpose. ●

**Access to Medicine Index:  
Overall Ranking 2021**

<b>01</b>	<b>GSK</b>
<b>02</b>	<b>Novartis</b>
<b>03</b>	<b>Johnson &amp; Johnson</b>
<b>04</b>	<b>Pfizer</b>
<b>05</b>	<b>Sanofi</b>
<b>06</b>	<b>Takeda</b>
<b>07</b>	<b>AstraZeneca</b>
<b>08</b>	<b>Merck KGaA</b>
<b>09</b>	<b>Roche</b>
<b>10</b>	<b>Novo Nordisk</b>

Source: Access to Medicine Foundation Index, 2021

# BREXIT REVISITED

Words by **Isabel O'Brien**

After years of tough negotiations, the ongoing Brexit saga has all but concluded, and the UK has left the European Union. We explore how pharmaceutical innovation has fared, as the UK works to replace EU resources and make use of their newfound regulatory freedom.

## Life Sciences in the UK

Source: BEIS, 2021



**5800**

Businesses



**250,000**

Employees

Another potential shortfall is funding into R&D. The former union shared resources throughout their partnership; the UK was granted access to EU initiatives such as Horizon 2020 and the European Investment Fund, at one time, benefited from 16% of the funding from one such initiative. Losing access to these resources is an undeniable hit, but the UK government has pledged to make up the difference in a bid to reduce the financial headache for developers. As the BEIS spokesperson comments: “We will use the regulatory freedoms gained by leaving the EU to grow the sector even further,” citing a £200 million fund to boost innovation which will be part of the total £14.6 billion investment pledge that will be made between 2021–2022 by the UK government.

While the UK is currently sitting in the top 3 life sciences hubs globally, the nation is hoping to attract new investment following its EU departure. “Brexit may result in the UK being able to make its R&D tax relief and tax credit schemes more generous without the caps dictated under EU law, ensuring that the UK businesses remain competitive in new markets, attract investment, and is comparable to other schemes such as Canada’s,” says Cooper. These tax reliefs coupled with the funding boost could position the UK as an attractive location for multinationals to come and develop their drugs.

### Clinical trials have continued due to the ease of access to the NHS data sets and patient cohorts

While Brexit may have been downgraded in public consciousness, behind the scenes the UK and the EU have been working hard to ensure that drug supply, clinical trials, and funding are not disrupted by the historic exit. As with any period of upheaval, challenges may lie ahead. At present, priorities are positioned in a cohesive and positive direction, ensuring the continuation of innovation for the benefit of patients on both sides of the split. ●

Brexit once dominated news headlines and conference agendas across Europe, yet over the past 12 months, the subject has been understandably usurped by the pandemic. But what has been the fall-out of the UK’s exit from the European Union? Since January 2021, UK innovation hubs and pharmaceutical companies have been adjusting to new structures, pathways, and protocols, but how are they working in conjunction with the British government and the EU to prevent shortfalls and reduced productivity?

The UK pharma sector employs over a quarter of a million people and delivers an annual turnover of >£80 billion. A spokesperson for the Department for Business, Energy & Industrial Strategy (BEIS) describes it as: “One of the world’s best research and science bases with globally renowned clinical research and an unparalleled cradle-to-grave healthcare system in the NHS.” Consequently, the nation has been eager to plug holes and seal gaps to avoid any undue deficits emerging during this monumental transition.

### The EU and UK recognised that there would be disruption to medicinal products

Supply chain contingency has been a source of anxiety for the public, concerns that were only exacerbated by the onset of COVID-19. While fears are legitimate, “The EU and UK recognised that there would be disruption to medicinal products,” says Deborah Cooper, Director, PwC. She goes on to assure that the exit deal included a caveat to mitigate disturbances: “The trade agreement had one notable exception, an annex to the deal established mutual recognition of inspections and good manufacturing practice, removing much of the duplicate regulation.” In the short term, there has been a 500% increase in the number of drugs that have been temporarily unavailable. However, when it comes to the bigger picture, these shortages will be, overall, temporary, with mutual recognition agreements facilitating efficient trading of pharmaceuticals by cutting costs for manufacturers, allowing for less facility inspections, and waiving the re-testing of products upon importation.

Clinical trial recruitment in the UK has also undergone a structural transformation. While UK innovation hubs once utilised the databases of potential trial participants from across the EU, “Numerous research registries are no longer available,” explains Cooper. However, she does assert that this is far from a fatal blow to clinical research: “Research and clinical trials have continued due to the ease of access to the NHS data sets and patient cohorts, and the collaborative approach of the MHRA and NICE in driving better clinical outcomes.” The two parties have worked in synergy to harness health data and support the continuation and success of clinical trials in the UK.

# DISEASE AWARENESS AT A DISTANCE

Words by Isabel O'Brien

When COVID-19 forced productions to shut down in 2020, it left a trail of unfinished commercials and campaigns in its wake. The advertising industry found itself amidst one of the most unique crises that even the oldest ad agency tycoon could recall. With ad spends down 9% on average across Europe, a call to get creative, be different, and go remote prevailed.

While the pharmaceutical industry initially followed the downward trend alongside other sectors, just as quickly, executives returned to agencies seeking a medium to reignite the dialogue between themselves, HCPs, and patients. But what have been the challenges and rewards of creating meaningful communications from a distance?

"There are a lot of challenges when you're not in person on a photoshoot or commercial," says Sean Welsh, Vice President, Associate Creative Director, Art, GSW Advertising. While virtual meetings allow for a project to be planned and discussed, "Traditionally, everyone would spend time getting to know each other in person and develop a similar point of view on the project." This encourages creativity to flourish and cohesion to be reached quickly, without the burden of temperamental connections or inconsistent audio.

Scheduling has also been a challenge, with project leads from the pharma companies and agencies often occupying varying time zones, "Call times can be extreme when you're not in person. Our first call time was 3 AM EST," adds Welsh. However, despite the logistical challenges, remote campaigns have been an unexpected hit, both with clients and their intended audiences.

Edmond Chan, Senior Director, EMEA Therapeutic Area Lead, Haemato-Oncology, Janssen, was working on a patient-targeted cancer awareness campaign when the pandemic derailed on-set productions. "Originally, an upcoming patient campaign we were developing was intended to have in-person video interviews," he says. "We moved conversations online and asked individuals to use their phones to record their thoughts through self-generated content. It actually turned out better; in a way, it felt less scripted and a lot more personal."

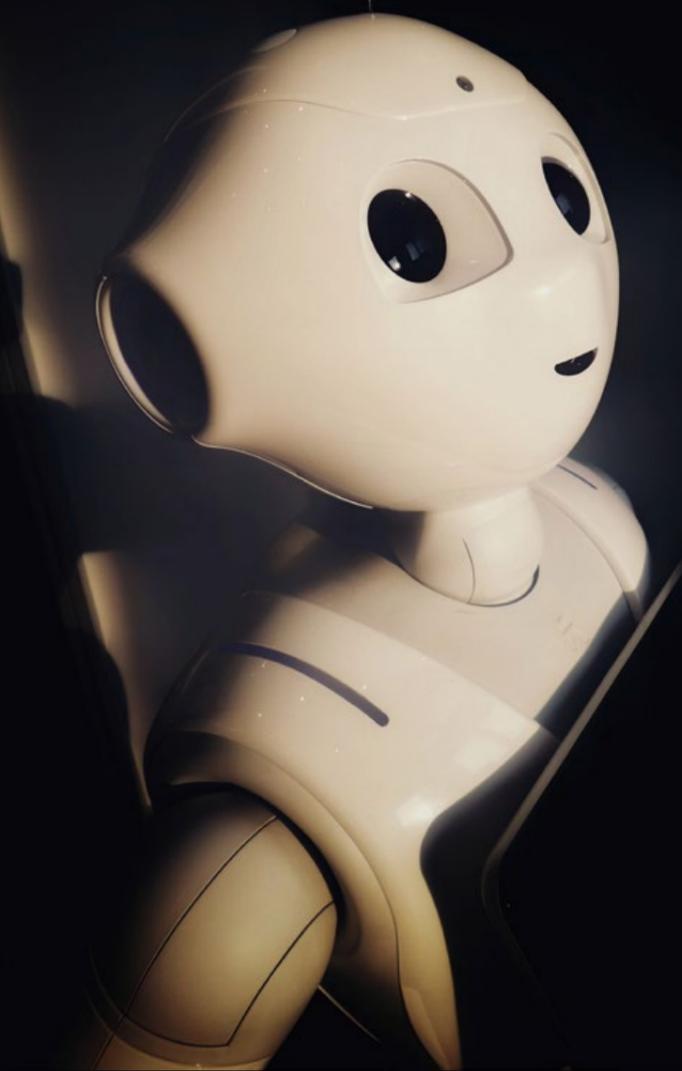
Welsh agrees that despite the communication challenges and unconventional wake up calls, remote or self-shot campaigns can lead to more genuine representations of the story that is looking to be told. "I think this form of advertising speaks with a more authentic voice. It appears less 'produced' and conveys a more honest form of storytelling. Showing imperfections and mistakes reflects the human experience. This type of advertising connects more on a human level," he says.

Accounting for the financial and environmental benefits as well, clearly these back-to-basics campaigns are a win-win for both agencies and their clients. "A large commercial such as a live-action filmed production needs a great deal of prep work, a large budget, and will usually include travel and some degree of post-production," says Jon Parkinson, Senior Vice President, Director Integrated Product, GSW Advertising. With both sides now understanding the potential of what is possible to accomplish with less money, less travel, and less curation, we can expect this brand of campaign to thrive – even once physical productions can be resumed.

As Chan concludes: "These more personalised connections are something we will continue – we're already thinking about how we can get more patients in that home setting to share their voice and thinking." For patients too, the burden of a campaign is greatly lessened; their story can be told in their words and on their terms, providing them with a platform to share, without the stresses and strains of an in-person production. ●

**This form of advertising  
speaks with a more  
authentic voice**

**These more personalised connections are  
something we will continue**



# HARNESSING AI FOR MARKETING ROI

Words by **Danny Buckland**

With investment in artificial intelligence on the rise across the pharmaceutical industry, we look at how AI tools can boost traditional marketing campaigns' productivity, improve targeting, and deliver significant business value.

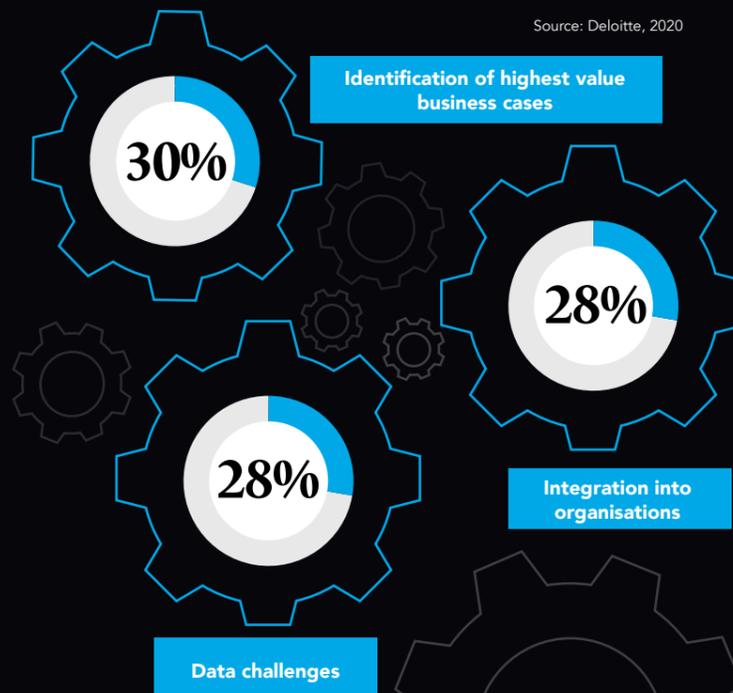
Random forests, white box, intelligent humans, regression, and hyperplanes; alien concepts to an untrained mind but approaching forces in the pharmaceutical space that have the potential to energise sales and marketing campaigns. Machine learning and AI have clear indications in diagnostics and drug development; now however, they are offering novel opportunities to improve return-on-investment (ROI) and patient outcomes.

Traditional routes to engagement and sales are already influenced by digital capabilities but a new wave of cyber techniques can harness the raging ocean of data that washes through pharma and healthcare. Reports from GlobalData, a leading data and analytics company, forecast that the disruptive force of AI will deliver productivity gains across all aspects of the value chain in the coming years. The challenge is to embrace its potential to offset the mounting budgetary pressure from drug development and traditional marketing campaigns.

Pharma can perhaps not harness the same agility as the social networking services Instagram and TikTok, yet it

## Challenges Impacting AI Initiatives

Source: Deloitte, 2020



can learn from the platforms' digital mastery of hooking an audience, as well as from the strategies of Amazon and Facebook – both now substantial forces in healthcare – to get a deep understanding of both clinician and patient preferences and aversions.

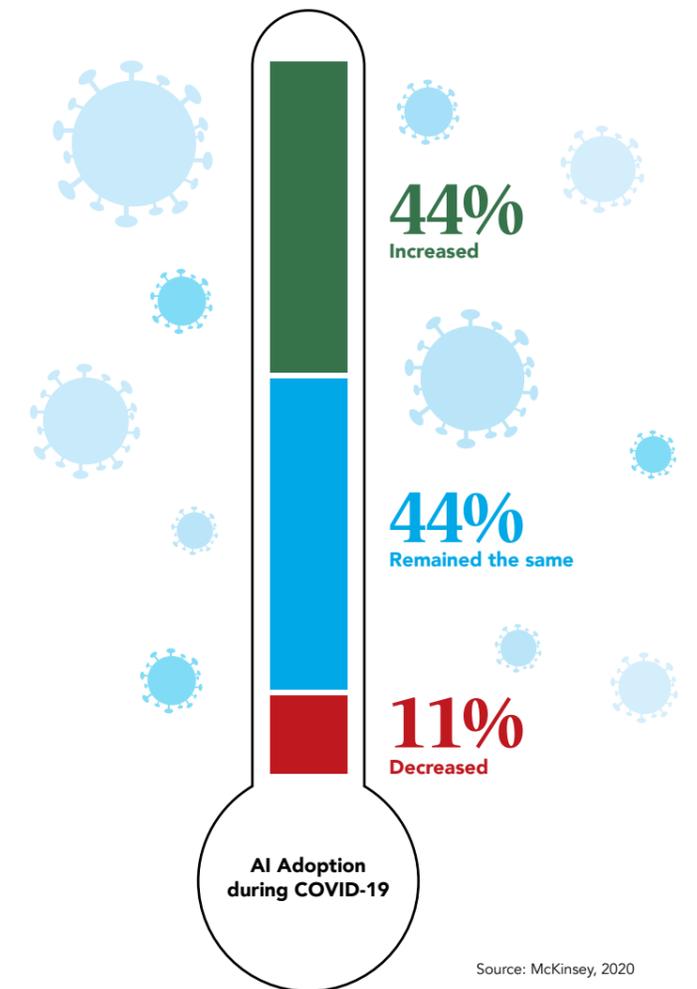
The rewards are clear but achieving them goes way beyond purchasing software and hiring a team of data scientists. A fundamental shift is needed to bolt AI into the wider business ecosystem. "Something I see repeatedly in pharma is a classic disconnect of data scientists not being business strategists who, in turn, don't understand data science. It is a challenge that is holding some pharma companies back because they choose the tech before they have identified the business challenge, when it should be the other way around," says Dr Andree Bates, Founder and CEO, Eularis, a leading supplier of marketing analytics. "We need to get them speaking the same language." Miscommunication has already derailed partnerships between pharma and data science organisations. "One big pharma company hired IBM Watson for data insight but it didn't work because they didn't understand what each other wanted. This is repeated across the industry and is wasting opportunity and budget," says Bates.

**The potential is enormous and there is a huge range of digital tools that are yet to be fully exploited**

Eularis has a vast tech toolbox to connect patient, clinician, and pharma rapidly. In one project, it collated the facial characteristics associated with a rare disease and deployed facial recognition software to crawl online sites, such as Facebook and Flickr, to identify patients and trigger adverts when they searched disease-specific information. The operation identified 13 new patients who accessed the treatment they needed and lead to a significant ROI. "The potential is enormous and there is a huge range of digital tools that are yet to be fully exploited," adds Bates, who has lead AI-powered programmes for top-tier industry companies across medical affairs, sales, and marketing.

Research by technology analytics company ZS highlights pharma's ad hoc approach to its data mountains which, although mainly unstructured, contain gold mines of intelligence on how patient behaviour nuances influences affinity and switching.

Roxanne Balfe, Senior Digital Healthcare Analyst, GlobalData, believes pharma has realised the competitive edge available from deploying algorithms, machine learning, and strategic software to illuminate fresh insights: "Pharma has not been the swiftest sector to take advantage but that is changing," she says. "There is a growing trend for pharma companies



to partner with smaller companies that are experts in digital innovation and technology rather than acquire them or grow them from within. This shows that pharma companies are aware they must learn from the technology industry and forge partnerships to deliver innovation, otherwise they will lose out to companies in the tech and retail space that have a strong online presence and dedicated customer base."

Security, privacy, and regulatory concerns are all issues but social media is also opening new landscapes for marketing. "Many influencers and users have gained popularity by sharing their healthcare experiences throughout the pandemic, opening up opportunities for pharma and healthcare to take advantage of the technology," adds Balfe. "These opportunities include insight mining: searching the platform for content related to a brand, disease state, or patient communities. Many influencers and patients have posted throughout 2020, either relating to healthcare experiences or specific conditions and diagnoses. Collaborating with healthcare professional influencers is especially relevant for younger audiences."

The human touch in sales and marketing is still critical but AI and machine learning are set to be a growing thicket within the pharma landscape. ●

# SPONFUL OF COLLABORATIONS

We highlight four standout examples of collaborations that sit beyond the traditional pharmaceutical-to-pharmaceutical model, noting partnerships within tech as well as creative approaches to communicating with patients and the public, such as documentaries, graphic novels, and music.

## NATIONAL GEOGRAPHIC'S VACCINE RACE DOCUMENTARY

Pfizer and BioNTech have collaborated with National Geographic on a behind-the-scenes documentary called 'Mission Possible'. The film tracks the development journey of their COVID-19 vaccine, highlighting the transparency employed to garner trust from the public in this historic moment, as well as illustrating the dedication and sacrifice of the vaccine scientists involved.



## BMS' 'PITCH PERFECT' MS CAMPAIGN

'Pitch Perfect' star and Tony award-winning actor Ben Platt, alongside his sister-in-law and professional dancer Courtney Platt, have teamed up with BMS for a multiple sclerosis awareness campaign titled 'MS in Harmony'. The campaign provides a comprehensive look at how music therapy enables people living with MS to strengthen their speech and mobility, running alongside the recent launch of their treatment for MS: Zeposia®.



## SANOFI TEAM UP WITH TECH GIANT GOOGLE

Sanofi have teamed up with Silicon Valley giant Google, as they seek to develop new digital technologies to improve care and outcomes for people living with both Type 1 and 2 diabetes. The pair hope that Google's expertise in analytics and miniaturised electronics combined with Sanofi's scientific expertise will enable the partnership to discover more real-time perspectives of patient health.

## GRAPHIC NOVEL AMPLIFIES PATIENT STORIES

Inspired and written by Jonathan Hill, a patient living with haemophilia, BioMarin and Believe have collaborated on a graphic novel named 'Blood of the Paladin' in order to raise awareness of the realities of the disease. The novel, partially influenced by Hill's own experiences of living with haemophilia, is set in the '80s and features the work of two artists: a traditional comic illustrator and a specialist Dungeons and Dragons artist. ●

## JAPAN'S RISE AND REMAIN

Words by **Cheyenne Eugene**

Japan has asserted itself among the top three nations within the global pharmaceutical industry, following closely behind the USA and China. The country evokes historical imagery of geishas and Emperors, alongside the dazzling modernisation of its capital, the bustling Tokyo, where you will find Japan's pharma-powers: Takeda, Daiichi Sankyo, and Astellas.

"Japan is the second largest branded pharmaceutical market," states Alan Thomas, Director, Thought Leadership, IQVIA Japan Group. "Positive Japanese government policy and initiatives encourage and reward investment." Government-led initiatives focus strikingly on research and development, with Thomas outlining: "The Sakigake system expanded inclusion of Japan in global clinical trials and consultation services to support clinical trial design and data requirements."

**If research is only sourced within Japan, it will become increasingly difficult to continuously develop innovative medicines**

A culture of collaboration has also been key to Japan's global success. "A free and open attitude allows our scientists to share skills, build knowledge, and work together," says Sunao Manabe, Representative Director, President and CEO, Daiichi Sankyo. "This has been pivotal to further advancing our cutting-edge science and technology."

While their strategies have triumphed, an increasing geriatric population and decreasing birth-rates has created complications that must be addressed. "A future roadblock to innovation is the potential strain on healthcare funding, including for pharmaceuticals, which is an easy target for funding reform

in Japan and other markets globally," says Thomas. Manabe speculates further: "Given the anticipated tightening of the healthcare budget, the market as a whole is expected to remain flat or slightly negative in growth as the reduction of National Health Insurance drug prices intensify."

Cuts to pharma's funding may be intuitive from a perspective of financial conservatism, however there is evidence that if healthcare and pharma work harmoniously together like a well-oiled bullet train, their symbiosis could save on long-term costs. "Immediate pharmaceutical intervention may reduce the need for longer-term non drug-related healthcare intervention, hospitalisation, surgical intervention, long-term care, and the nursing care burden, which will ultimately save on costs. This is particularly true in a number of specialty areas, including oncology, where patient populations and disease prevalence are increasing," says Thomas.

So, will funding strains impede Japan's reputation for innovation? Shifting drug prices could endanger partnerships, the unions becoming less appealing to outside investors. "We may see a shift in investment decisions in R&D in some disease areas," says Thomas. "Because of this, innovation may be slowed and could result in under-served medical needs across some therapy areas," he warns. Manabe seconds this: "If research is only sourced within Japan, it will become increasingly difficult to continuously develop innovative medicines."

While these risks must be monitored, Manabe predicts: "Innovative medicines, particularly those that treat cancer, are expected to keep growing in the future." With Thomas corroborating: "True innovation will continue to be rewarded." It is crucial that despite some funding hurdles, Japan is intent on reassuring concerned investors and enticing new ones.

Japan is a country steeped in culture that is a valuable contributor to global pharma and world health. A financially restrictive climate poses a considerable challenge to maintaining investor appeal in certain therapeutic areas, however Japan's focus remains firmly on innovation. Right now, the seas may appear choppy, but Japan already has the wind in its sails and a history of successes on its side. ●

# woman of the year

virtual  
6 may 2021  
#hbawoty21



woman of the year  
Dr. Sandra Horning  
Genentech and Roche



honorable mentor  
Dr. Rod MacKenzie  
Pfizer



STAR  
Susan Torroella  
ArmadaHealth

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- + Engage in greater opportunities to enrich your network and inspire others.
- + Immerse yourself in energizing relationship-building experiences unique to the HBA.
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[HBA.net.org/2021WOTY](https://HBA.net.org/2021WOTY)



## TAKING OWNERSHIP OF OUR WORDS, PRIORITIES, AND ACTIONS, TO CREATE A CULTURE OF BELONGING



Words by **Laurie Cooke**

President and CEO, Healthcare  
Businesswomen's Association (HBA)

**T**his past year has shed light on some of our world's biggest challenges. From data showing how pandemics disproportionately impact underserved communities and women came a renewed focus on equity. From the clear damage of misinformation came a call to combat this global problem. And from forced isolation came a deeper understanding of what it means to belong. World events have forced us to take ownership of our words, our priorities, and our actions.

One of the most impactful conversations for me this year is one we've had in the HBA around what we mean by words like inclusivity, diversity, and belonging. As Nikki Jones, Head of Diversity, Equity, and Inclusion and People Ops, HBA explains it: "Diversity is when you're invited to the dance. Inclusivity is when you're asked to dance. Belonging is when they're playing your music at the dance."

While diversity and inclusion are important, they are merely starting points, ones that far too many of us have been content with stopping at for far too long. To be full and equal partners,

we must each be able to bring our authentic selves to our work; we must be able to see ourselves in the people and structures around us.

Creating a culture of belonging makes us all better. When we can be authentic, creativity and collaboration flourish. When we can share opinions and vulnerabilities honestly, we leave less space for bias and misinformation to take root. When we can trust that we are treated and paid fairly, we can better focus on serving our customers.

In the HBA, we've spent the past few years pushing ourselves to take a bold stance on achieving belonging in the form of gender parity. We've worked to answer the call to challenge our assumptions and ensure we're working on behalf of women of all races, ethnicities, identities, and abilities.

We started by defining our primary goal of achieving gender parity and how we mean to achieve it. This clarity and accountability helped everyone in our organisation unite behind a common purpose.

We then invited our industry partners to do the same. Through our Gender Parity Collaborative, our partners share data and engage in honest reflections on their companies' representation and culture. They hold each other accountable, not just for the number of women in leadership, but how women, and especially women of colour, are represented and supported throughout the hiring pipeline. We started partnerships with leading research organisations, such as McKinsey & Company, to define and track progress on gender equity issues.

Finally, we worked to strengthen our culture of 'radical hospitality'. Through programmes such as HBA Berlin's recent session on unconscious bias, we create spaces for our members to learn and grow, and through member surveys and forums, we create a continuous feedback loop to quickly identify issues, reflect, and take action. Yet we know that our work is never finished because the only way to achieve a lasting culture of belonging is to continue to listen, learn, and evolve. ●



# TO BE OR TO BELONG?

Words by **Michaila Byrne**

**You won't see the real benefits of diversity unless there is an inclusive culture**

explains: "Many organisations have aspirations to build a more diverse workforce, one that reflects the communities in which we live and work. However, you won't see the real benefits of diversity unless there is an inclusive culture... it's about actions matching words and having a culture where people feel safe to bring their full and authentic self to work every day." It is a conscious mentality that needs to be adopted at every level, as Stacey Minton, Senior Vice President, Head of Corporate Affairs, Kyowa Kirin International, points out: "We've also moved past that era where DI&B is something that sits solely within the HR function. It needs to be embraced and embedded across the whole organisation."

So why do even the best of intentions often fall short? Schuller suspects: "Some common pitfalls include not being an active listener, not being educated or informed on diversity and inclusion topics, not being willing to be vulnerable, not understanding your own biases, and not being an advocate for underrepresented groups." Particularly with more established companies, culture is the summation of long-standing practices and approaches that have become so ingrained to the point in which their presence is not questioned.

Another challenge of belonging is that 'a feeling' is not easily quantifiable, so how can companies hope to evolve as they seek to improve their culture going forward? As Schuller says: "The focus on DI&B needs to be prioritised by the CEO and executive team and there should be tangible accountability measures underpinning it." What is equally as important is addressing things on a deeper, more personal level: "Ensuring leaders are equipped to create a psychologically safe environment and build diverse and inclusive teams," she adds.

Jeremy Morgan, Senior Vice President, Commercial, Kyowa Kirin International, reiterates that the maintaining and building of DI&B is not only beneficial for culture but it also makes real business sense: "From a broader business perspective, our job is to put patients first. We cannot do that authentically if we cannot understand the heterogeneity of our patients and customers, and we cannot do that if our team is homogenous."

If a sense of belonging can be effectively nurtured in the corporate arena, it means that employees will not feel the need to dim their authentic selves. Instead, as Qadeer puts it: "They can reach for the very dial of who they are, turn the dial all the way to 10, bring their authentic selves to work, and spur innovation." ●

**A**s humans, it is in our nature to strive for a sense of belonging within a tribe. With social distancing measures in place to prevent us from mixing with our families, attending events, and working alongside colleagues, we have been forced to consider what it means to truly belong. Diversity and inclusion (D&I) has become a core focus for the pharmaceutical industry within the HR function and beyond; but it is merely a starting point in a series of considerations on the road to cultivating an environment where people feel a sense of belonging.

**The focus on DI&B needs to be prioritised by the CEO and executive team**

Diversity is a fact of existence, inclusion is a choice, but belonging is a feeling. "One of the biggest trends driving HR today is all about a power shift from D&I to the big picture goal of belonging. Belonging is the most important; it is a pact that people make with each other to help appreciate and amplify one another's uniqueness," says Uzair Qadeer, Chief Diversity Officer, Alexion. At the very heart of diversity, inclusion, and belonging (DI&B) is valuing others for the qualities that make them different, not in spite of them. Colleen Schuller, Vice President, US Head of Inclusion and Diversity, GSK,



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